

Amendment and Response

Applicant: Ralf Otremba

Serial No.: 10/767,706

Filed: January 29, 2004

Docket No.: I434.102.101/IFT979US

Title: SEMICONDUCTOR COMPONENT HAVING AT LEAST TWO CHIPS WHICH ARE INTEGRATED IN A HOUSING AND WITH WHICH CONTACT IS MADE BY A COMMON CONTACT CHIP

REMARKS

The following remarks are made in response to the Office Action mailed April 4, 2005. Claims 1-18 were rejected. With this Response, claims 1, 4, 5, 10, and 16 have been amended. Claim 19 has been added. Claims 1-19 remain pending in the application and are presented for reconsideration and allowance.

Claim Objections

The Examiner objected to claims 4 and 5 because of the limitation “a bent section which, below the underside, forms a connection contact,” and “exits from the housing at the underside,” respectively. There is no mention of the “underside” in claim 2. The Examiner requests clarification to obtain consistency between claims.

Claims 4 and 5 have now been amended to depend on claim 3, which does recite “an underside.” In this way, these claims are clarified such that the objection should now be withdrawn.

Claim Rejections under 35 U.S.C. § 102

The Examiner rejected claims 1, 3-6, 8-14, and 16-18 under 35 U.S.C. § 102(b) as being anticipated by Beilstein, Jr. et al. U.S. Patent No. 5,719,438.

Claim 1 recites a semiconductor component with a housing and at least two semiconductor chips arranged within the housing. Each of the semiconductor chips has a front side and a rear side, and each chip has at least one contact area at the front or rear side. Furthermore, a contact clip is disposed within the housing and projects from the housing. The contact clip has a plate-type section with a first and a second connection area that are opposite one another and which makes contact with at least two of the chips. The first connection area is applied to the contact area of at least one of the chips and the second connection area is applied to the contact area of at least another of the chips.

Such semiconductor component is not disclosed or suggest by Beilstein. Instead, Beilstein (referring to Figure 7) discloses a semiconductor module having a number of chips 13

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with each of these chips being contacted by a “transfer metal” 15. An isolation layer 17 is disposed between two adjacent chips 13, which electrically isolates two adjacent chips from one another. Significantly, this isolation prevents the transfer metal 15 from contacting more than one of these adjacent chips 13. In this way, contrary to the semiconductor component of claim 1, these transfer metals 15 do not have a plate-type section with a first and a second connection area; and they do not have a first connection applied to one chip and a second of these connection areas being applied to another chip.

Applicant respectfully disagrees with the Examiner that wiring element 97 in Figure 12 would fulfill the function of the contact clip according to claim 1. As disclosed there, the wiring element 97 does not have a plate-type section with a first and a second connection area to which two chips are applied. Furthermore, the electronic package depicted in Figure 12 is also illustrating a semiconductor module having a number of chips having an isolation layer disposed between two adjacent chips to electrically isolate two adjacent chips from one another. As indicated in column 15, lines 18-20, the electronic package depicted in Figure 12 contains an “electronic module 11 which may be fabricated using the techniques previously described herein.” In this way, while there is a suggestion of adding wiring to provide further connection to the chips, there is no teaching of using a contact clip to electrically coupled chips that are in fact electronically isolated from each other.

Furthermore, Applicant has now amended claims 1, 10, and 16 to further clarify that contact areas of the two semiconductor chips are electrically coupled by the contact clip. This amendment is supported in the specification on page 7, lines 22 and 23. This feature is not shown or suggested in any of the art of record. In fact, the isolation of chips in Beilstein teaches away from this. Consequently, claims 1, 10, and 16 and consequently their dependent claims 2-9, 11-15, and 17-18 are allowable over the art of record. Claim 19, which includes this same limitation, is also allowable.

Therefore, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 102(b) rejection to claims 1, 3-6, 8-14, and 16-18, and request allowance of claims 1-19.

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Claim Rejections under 35 U.S.C. § 103

The Examiner rejected claims 2, 7, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Beilstein, Jr. et al. U.S. Patent No. 5,719,438 as applied to claims 1, 3-6, 8-14, and 16-18 and further in view of Huang et al. U.S. Patent No. 6,784,488.

As indicated above, amended claims 1, 10, and 16 are allowable over the art of record for the reasons detailed above, and consequently so are these dependent claims.

Therefore, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejection to claims 2, 7, and 15, and request allowance of these claims.

CONCLUSION

In view of the above, Applicant respectfully submits that pending claims 1-19 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-19 is respectfully requested.

Applicant hereby authorizes the Commissioner for Patents to charge Deposit Account No. 50-0471 in the amount of 200.00 to cover the fees as set forth under 37 C.F.R. 1.16(h)(i).

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The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Respectfully submitted,

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By his attorneys,

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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 4th day of August, 2005.

By 

Name: Paul P. Kempf